
CHAPTER 10

COMBAT SUPPORT

The ability to apply superior combat power at decisive times and places determines the outcome of battles. The maneuver commander uses all available combat and combat support assets to enhance the capabilities of his maneuver units. He also uses these assets to apply weight to the main effort. Knowing the capabilities of the available assets, assigning them appropriate missions, and synchronizing their operations are essential to the application of superior combat power. Task organized resources must be an integral and active part of the plan, not an afterthought. Representatives from the associated combat and CS units must be involved from the very onset in the planning sequence. The commander must clearly articulate what he wants done to the enemy for the additional combat and CS elements to prepare employment recommendations.

Section I. FIRES AND EFFECTS

The fires and effects system coordinates and provides full spectrum fires and effects in time, space, and purpose in support of the Stryker brigade combat team. It integrates and synchronizes fires and effects to delay, disrupt, or destroy enemy forces, systems, and facilities. The system includes the collective and coordinated use of target acquisition data, indirect-fire weapons, fixed-wing aircraft, EW, and other lethal and non-lethal means to attack targets. This support enables the SBCT to conduct decisive operations during a major theater war, a small-scale contingency, a stability operation, or a support operation. When effectively integrated with maneuver, fire support (FS) assets are tremendous combat multipliers. However, the focus of fires is sometimes lost amid the confusion of battle, thus reducing the brigade's effectiveness. The brigade staff, in conjunction with the ECOORD and DECOORD, must maintain this focus of fires for the brigade. Throughout operations, fires must be continually directed and concentrated on the essential tasks assigned by the brigade commander. Effects-based fires focus on the accomplishment of essential fires and effects tasks. These tasks determine the critical places on the battlefield where the commander wants to influence the battle with focused fires and effects.

10-1. MISSION AND CAPABILITIES

The effects system acquires targets, delivers fires, and coordinates full-spectrum fires and effects to support the combined arms operation enabling the SBCT to shape the battlespace, protect the force, and set the conditions for decisive operations. In doing so, the fires and effects system must capitalize on the capabilities of digitized command, control, communication, computers, intelligence, surveillance, and reconnaissance (the brigade's command and control infrastructure), thus exploiting the marked advantage provided by information superiority.

a. Throughout any operation, fires and effects must be continually directed and concentrated on the essential tasks assigned by the SBCT commander. The primary

technique used to maintain a strong focus of fires is the EFET methodology (Figure 10-1).

b. The SBCT employs effects-based fires to set the conditions for its operations. Effects-based fires apply a desired effect to achieve a specified purpose (shaping, protective, decisive) in time and space. This approach develops EFET to focus full spectrum effects against a high-payoff target within the battlespace to achieve a desired effect and purpose. An EFET is an application of fires and effects required to support a combined arms course of action. Failure to achieve an EFET may require the SBCT commander to alter his tactical plan. A complete EFET consists of a task (effect), purpose, method, and assessment.

(1) The *task* is the effect (what) desired to apply against the target (for example, suppress and obscure the southern motorized rifle company).

(2) The *purpose* (why) is the combined arms outcome desired as a result of applying the effect (for example, enable the breach force to reduce the obstacle and establish far side security).

(3) The *method* (how) consists of acquisition and or tracking, delivery of effects (lethal and or nonlethal) and restrictions.

(4) *Assessment* determines if the desired effect was created and the purpose achieved. Achievement of the purpose equals end state for the EFET.

c. In order for the ECOORD to meet the challenges of achieving the brigade's EFETs, he must ensure that full-spectrum effects are produced through the integrated and synchronized application of lethal and nonlethal capabilities. To assist him in doing this, the ECCOORD employs the fires and effect coordination process. This method continues the process of planning, integrating, and orchestrating full-spectrum fires and effects in support of the combined arms operation to achieve the commander's desired end state. The process includes the management of delivery assets and sensors and direct coordination with the combined arms commander. The application of fires and effects must be fully nested within the SBCT's concept of operation. During execution of the SBCT's tactical plan, digitized C2 INFOSYS are essential to provide responsive and precise effects. C2 INFOSYS serve as a cornerstone of effects-based fires because it has capability to integrate digital enemy locations with the digital call for fire to produce effective rounds on the enemy in the shortest amount of time possible.

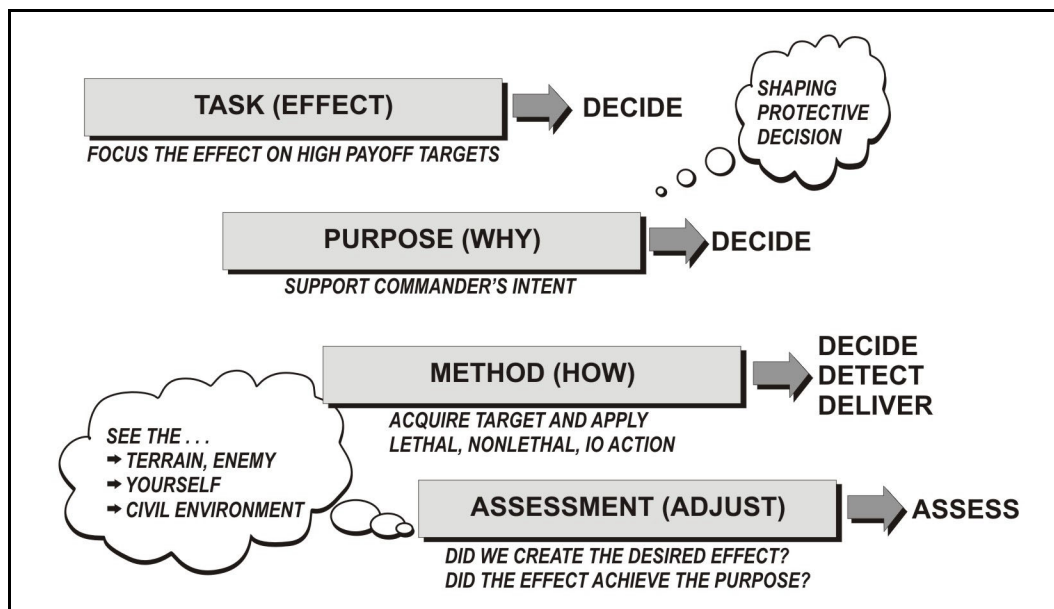


Figure 10-1. Fires and effects coordination methodology.

d. FS is the collective and coordinated use of indirect-fire weapons, armed aircraft, and other lethal and nonlethal means in support of a battle plan. FS includes mortars, FA, naval gunfire (NGF), and CAS. Nonlethal means include the EW capabilities of MI organizations, illumination, smoke, CA, PSYOP, and public affairs efforts. The SBCT commander employs these means to support his scheme of maneuver; mass firepower; and delay, disrupt, or destroy enemy forces in depth to achieve information superiority (nonlethal). FS planning and coordination exist at all echelons of maneuver. These assets support brigade operations by disrupting, delaying, diverting, limiting, and destroying enemy forces. The brigade commander and ECOORD must know the capabilities and limitations of the systems available.

10-2. FIELD ARTILLERY

The brigade commander and his ECOORD (the brigade's artillery DS battalion commander) have one 155-mm howitzer battalion in the brigade. Additional FA battalions may reinforce the SBCT's DS battalion and or provide GS fires to the brigade based on their availability and the priorities of the higher headquarters commander.

10-3. AIR SUPPORT

The Air Force, Navy, and Marine Corps can provide the brigade with--

- Close air support.
- Combat air reconnaissance.
- Tactical airlift.
- Electronic combat.
- Air interdiction.

a. **Close Air Support Allocation.** Brigades are generally allocated CAS aircraft only. CAS is defined as air attacks on hostile surface forces that are in close proximity of friendly troops. CAS can be employed to blunt an enemy attack, support the momentum

of the ground attack, or provide cover for friendly movements. For best results while avoiding mutual interference or fratricide, aircraft are kept under "detailed integration" (part of the Air Force's combat air system). Until the USAF achieves air superiority, competing demands between CAS and counterair operations may limit sorties apportioned for the CAS role. Nomination of CAS targets is the responsibility of the commander, ALO, and S3 at each level. (See Appendix G, Air Assault Operations.)

b. **Employment and Planning Considerations.** The commander should collocate all FS personnel. If there are representatives from the other services, they should also be located with the FS personnel. This will ensure the proper integration and planning of all CAS missions. CAS missions are broken down into two types--preplanned or immediate. Preplanned CAS is categorized as follows:

- **Scheduled Mission--CAS** strikes on a planned target at a planned time (time on target [TOT]).
- **Alert Mission--CAS** strikes on a planned target or target area executed when requested by the supported unit. This mission usually is launched from a ground alert (scramble), but it may be flown from an airborne alert status.

c. **Preplanning.** Preplanned CAS generally is requested 72 hours out. Preplanned requests normally do not include detailed target information because of the lead time for the mission. However, preplanned requests must identify potential targets, desired effects, proposed times, and priority.

d. **Immediate Mission.** Immediate air support is designed to meet specific requests which arise within the course of a battle and which, by their nature, cannot be planned in advance.

10-4. NAVAL GUNFIRE

Naval gunfire can provide large volumes of immediately available, responsive FS to land combat forces operating near coastal waters. NGF has a wide variety of weapons extending from light conventional armament to heavy missiles and nuclear weapons. It can play a vital role in reducing the enemy capability of action by destroying enemy installations before the assault and protecting and covering supporting offensive actions of the land force after the assault.

a. **Command and Control.** NGF ships are assigned one of two missions—DS or GS. A ship in DS of a maneuver unit delivers both planned and on-call fires (targets of opportunity). Navy liaison representatives located with supported ground forces assist the naval commander in the control of NGF. GS missions are assigned to ships supporting forces of brigade size and larger.

b. **Employment and Planning Considerations.** NGF ships are very mobile, which allows them to be positioned to take advantage of their limited deflection pattern. Very close supporting fire can be delivered when the gun-target line is parallel to friendly front lines.

Section II. INFORMATION OPERATIONS

Civil affairs, psychological operations, electronic warfare, and public affairs personnel and teams may be attached to the brigade. These units provide the commander with insight, guidance, and information directed primarily at the interaction with civilian departments and personnel. These types of units are not permanent portions of the

brigade, but they are task-organized to the brigade for specific missions. The brigade should always attempt to conduct predeployment training with these units to ensure they are accustomed to working with the brigade.

10-5. CIVIL AFFAIRS

Civil affairs elements perform important liaison functions between the military force and the local civil authorities, international organizations, and NGOs established in the AO. CA provides the commander with the means to shape his battlespace with regard to these significant factors and to synchronize their actions with those of the military force.

a. CA personnel engage in a variety of activities such as civil-military relations, military civic action, populace and resource control, and care of refugees. CA elements can assess the needs of civil authorities, act as an interface between civil authorities and the military supporting agency, and as liaison to the civil populace. They can develop population and resource control measures and coordinate with international support agencies.

b. CA personnel are regionally oriented and possess cultural and linguistic knowledge of countries in each region. Most CA personnel have extensive experience in combat arms or combat support prior to assignment to CA units. With guidance from the commander on desired effects, CA personnel have a wide variety of resources at their disposal to influence the AO. CA is a combat multiplier in this sense. Additionally, the civilian skills CA units possess allow them to assess and coordinate infrastructure activities.

10-6. PSYCHOLOGICAL OPERATIONS

Psychological operations are planned to convey selected information and indicators to foreign audiences to influence their emotions, motives, and objective reasoning. The ultimate goal of PSYOP is to influence the behavior of foreign governments, organizations, groups, and individuals. PSYOP support encompasses area and target analysis, product development, and media production at the strategic, operational, and tactical levels.

a. The tactical PSYOP battalion provides short-notice, tactical PSYOP support to deployed corps-size units and below. The tactical PSYOP battalion provides the theater combatant commander and CONUS-based rapid deployment forces with a responsive, linguistically capable, and culturally attuned tactical PSYOP force. Each of the battalion's companies is focused on a specific theater and aligned with specific units. The tactical PSYOP battalion assigns its subordinate tactical PSYOP companies as tactical PSYOP development detachments supporting division-size units.

b. The tactical PSYOP detachment supporting the division may support the brigade with a tactical PSYOP team. The smallest unit of tactical PSYOP support is the three-soldier team that supports battalion and smaller size units. The tactical PSYOP detachment exercises staff supervision over all tactical PSYOP teams allocated to divisional units, monitoring their status and providing assistance in PSYOP planning, as needed.

(1) When attached to a maneuver brigade or battalion, the tactical PSYOP team disseminates PSYOP messages using loudspeaker, radio, print, and television media. The

tactical loudspeakers employed by the teams can achieve immediate and direct contact with a target audience and are used heavily during contingency operations.

(2) Tactical PSYOP teams can conduct other types of PSYOP missions. They can disseminate printed materials, perform face-to-face PSYOP, gather and assess the effectiveness of friendly and hostile PSYOP, and acquire PSYOP-relevant information from the local populace.

(3) The tactical PSYOP team does not have any PSYOP product development capability, but with commander's guidance it can provide feedback on themes to exploit and employ PSYOP supporting assets at higher echelons of command to generate products for a targeted area.

c. The focus of brigade level PSYOP planning is on the integration and dissemination of previously developed and approved products to support the maneuver commander. The PSYOP team leader works directly with the S3 to plan and coordinate PSYOP in support of the operation.

d. Like CA personnel, PSYOP personnel generally have extensive experience in combat arms or combat support prior to assignment to PSYOP units. With guidance from the commander on desired effects, PSYOP personnel have a wide variety of resources at their disposal to influence the commander's AO. PSYOP are also a combat multiplier, employing limited US assets with a broad effect.

10-7. PUBLIC AFFAIRS

The effects of the media on operations and the public affairs implications of current and future operations and events are vitally important to the Army. At brigade level, a representative from the public affairs office assists and advises the commander as to the command and public information programs within the command and media relations. Public affairs units are configured and tailored to accomplish various missions and to provide the supported unit with several abilities. The PAO can also be employed in a liaison role with the media, not to control them but to coordinate access with regard to physical and operational security for both members of the media and the command. PAOs are most important in the areas of command information and media relations

Section III. MANEUVER SUPPORT

The SBCT's organic engineers and augmenting forces provide embedded and responsive maneuver support to the SBCT's decisive, shaping, and sustainment operations. The SBCT staff integrates these assets into maneuver operations and organizations at all levels based on the factors of METT-TC and the commander's guidance. The SBCT is organized with an engineer company and has a MANSPT cell with both engineer and military police planners. Maneuver support capabilities are discussed in this section.

10-8. ENGINEER FUNCTIONS

Engineers perform essential mobility, countermobility, and survivability tasks for the brigade. The brigade uses engineers to shape its AO by providing freedom of maneuver for friendly forces, denying it to the enemy, and protecting friendly forces from the effects of enemy action and natural incidents. Combat engineers are an integral part of the combined arms team. The two core qualities of the SBCT are high mobility and the ability to achieve decisive action through dismounted infantry assault. In light of these

core qualities, the SBCT engineer structure appears austere, as it is an adaptation of the current light engineer organizational structure and modified mechanized engineer equipment capability. SBCT combat engineers provide the following primary engineering functions.

a. **Mobility.** Mobility preserves the freedom of maneuver of friendly forces. Mobility missions include breaching enemy obstacles, increasing battlefield circulation, improving existing routes, providing limited bridge support for river crossings, and identifying routes around contaminated areas.

b. **Counter mobility.** Counter mobility denies mobility to the enemy forces so Army forces can destroy them with fires and maneuver. Counter mobility limits the maneuver of enemy forces and enhances the effectiveness of fires. Counter mobility missions include building obstacles and using smoke to hinder enemy maneuver.

c. **Survivability.** Survivability protects friendly forces from the effects of enemy weapon systems and from natural occurrences. Hardening of facilities and fortification of battle positions are active survivability measures. Military deception, OPSEC, and dispersion can increase survivability.

d. **Geospatial Engineering.** Geospatial engineering is the collection, development, dissemination, and analysis of positionally accurate terrain information that is tied to some earth reference. Geospatial engineering provides mission-tailored data, tactical decision aids, and visualization products that define the character of the area of operations for the maneuver commander. Key aspects of this mission are databases, analysis and survey control, and paper products. Geospatial engineering provides the commander with a common view of the terrain (terrain visualization) which enables him to visualize and describe his intent. This capability also provides the common map background for the common operating picture which the commander uses to direct his subordinates.

e. **General Engineering.** General engineering encompasses those engineer tasks that increase the mobility, survivability, and sustainability of tactical and logistical units. Such tasks include construction and repair of lines of communication, main supply routes, airfields, and logistical facilities. Due to the austere organization of the engineer company in the SBCT, execution of general engineering tasks will require augmentation. The brigade engineer has the responsibility for this coordination, should it be necessary.

10-9. STAFF ENGINEER SECTION

The staff engineer section provides the only organic, full-spectrum staff engineer and topographic support within the SBCT. This section is physically and operationally integrated into the SBCT staff.

a. The staff engineer section is the focal point for all SBCT engineer planning and integration into the MDMP. The section utilizes the essential mobility-survivability tasks (EMST) format to communicate to subordinate units what the SBCT commander wants accomplished with the available M/S assets. (Refer to FM 101-5 for a discussion of EMST.) Through this and its enhanced SU, the staff engineer section is capable of preparing executable engineer plans and orders that require minimal refinement by subordinate units. This capability, coupled with digital dissemination of information, minimizes the need for time-consuming engineer planning at battalion and company level during SSC and stability and support operations.

b. The staff engineer section task-organizes and performs staff supervision for all organic and augmentation engineer forces and any host nation, coalition and or contracted engineer support under SBCT control and or operating within the SBCT AO. The section digitally tracks, reports, analyzes, and disseminates all engineer and terrain-related information that may influence SBCT operations, including a “dirty battlefield” database. An obstacle database includes all confirmed obstacles, mines, munitions, and unexploded ordnance encountered by the force during any action or operation.

10-10. ENGINEER COMPANY

The SBCT’s organic engineer company provides embedded, responsive maneuver support to decisive, shaping, and sustaining operations.

a. Optimized for mobility support, the engineer company performs both mounted and dismounted mobility tasks. The engineer company has very limited countermobility and survivability capability. It relies heavily on the integration of SCATMINE systems and complex or urban terrain to rapidly support temporary defensive actions. The engineer company requires augmentation engineer forces to support more permanent defensive actions.

b. The engineer company readily integrates into maneuver operations and organizations at all levels based on the analysis of required tasks performed by the staff engineer section. The engineer company commander provides combat power and capability status for integration into the SBCT planning process. The engineer company has three combat mobility platoons, one mobility support platoon, and a company headquarters section. The engineer company can task-organize its platoons in specific command and support relationships to infantry battalions and or companies to provide a tailored mission-specific package during distributed offensive and defensive operations. During these distributed operations, the engineer company commander will typically work with the mobility main effort battalion, the battalion that is assigned the SBCT commander’s most critical EMST, and the company XO with the supporting effort. The engineers and related mobility assets may be consolidated under the engineer company to support more centralized operations (such as mounted breaching or complex obstacle construction) or to significantly weight a battalion conducting decisive SBCT operations.

(1) ***Combat Mobility Platoon.*** The combat mobility platoon is the basic building block of engineer force allocation, and it can fight as part of the engineer company or as part of a maneuver company or team. The combat mobility platoon is normally the lowest-level engineer unit that can effectively accomplish independent mounted engineer missions and tasks. The platoon may receive task-specific equipment from the mobility support platoon.

(2) ***Mobility Support Platoon.*** The mobility support platoon consists of a platoon headquarters section and three equipment-based mobility sections. The mobility support platoon is not organized to operate independently during offensive operations like the combat mobility platoons. Each section is structured to provide equipment augmentation to each of the three combat mobility platoons, focused on reducing constructed obstacles and fortifications. The mobility support platoon can perform limited countermobility, survivability, and sustainment engineering tasks.

10-11. MOBILITY

Mobility is a core capability of the SBCT. Mobility operations maintain unimpeded freedom of movement and maneuver for personnel and equipment throughout the depth of the SBCT AO during decisive, shaping, and sustaining operations. Because of the potentially asymmetric, nonlinear nature of the enemy and their obstacles, engineers must be prepared to perform mounted and dismounted mobility tasks using manual, mechanical, and explosive reduction means. These mobility tasks generally take the form of--

- Bypassing obstacles.
- Manual obstacle breaching for dismounted assaults.
- Mechanical and explosive obstacle breaching for mounted movement or maneuver.
- Limited maintenance and or repair of lines of communication.

Therefore, SBCT mobility planning considerations, although consistent with current doctrine, integrate and adapt the planning considerations of both heavy and light forces and apply them to SSC and an asymmetric enemy.

a. **Breaching Operations.** The greatest shift in mobility planning occurs with the impact that RSTA and C2 INFOSYS capabilities have on combined arms breaching operations. Enhanced SU and information superiority allows greater precision in the application of the breaching tenets of intelligence, breaching fundamentals, breaching organization, mass, and synchronization.

(1) **Intelligence.** By focusing a portion of cavalry squadron (RSTA) collection effort on obstacle intelligence (OBSTINTEL), the SBCT will get accurate, real-time information on the composition, size, location, orientation, and overwatching of enemy obstacles throughout the depth of the AO. Engineer reconnaissance teams may be integrated into the cavalry squadron (RSTA) to collect OBSTINTEL, especially if a breaching operation is an integral part of a decisive operation. Timely and accurate OBSTINTEL, available early in the planning process, allows greater precision in the decision to bypass or breach and the selection of bypass and or breach site locations. Through its RSTA and C2 INFOSYS capability, the SBCT is able to identify multiple bypass routes that best support the scheme of maneuver and avoid unwanted enemy contact.

(2) **Breaching Fundamentals.** Through the multi-echelon, collaborative planning allowed by the digital dissemination of intelligence, information, and plans and or orders, the SBCT is capable of integrating the fundamentals of suppress, obscure, secure, reduce, and assault (SOSRA). As a result, the SBCT can--

- Organize, position, and synchronize precise direct- and indirect-suppressive fires.
- Employ timely and accurate obscuring smoke to effectively isolate known enemy positions.
- Accurately select a breach site that is supported by masking terrain and economize the amount of maneuver force required to locally secure the site.
- Establish, track, execute, and digitally report breach force commitment criteria that will reduce exposure time and minimize casualties.

(3) **Breaching Organization (Assault, Breach, and Support).** Increased SU allows the SBCT to efficiently organize the force for mounted or dismounted breaching

operations. The SBCT can maximize its ability to weight the combat power of the assault force by economizing elsewhere. The breach force can be organized with only specific, redundant breaching equipment and manpower required to breach known obstacle types. The staff engineer allocates the SBCT engineer company mobility assets to infantry battalions and companies based on a comprehensive estimate of the mobility tasks required for a specific operation. The staff engineer will typically assign two mine clearing line charge (MICLIC) launchers (one combat mobility platoon) for every 100m deep lane required. If faced with complex obstacle belts, two additional launchers will be required for each additional 100m depth of the obstacle. The ability to task-organize mobility assets against specific targets identified by the OBSTINTEL reduces the historically cumbersome size of the breaching force and minimizes its signature as a lucrative target. This ability reduces the historically cumbersome size of the breaching force and minimizes its signature as a lucrative target. Similarly, the support force can be economically organized with only those precision direct- and indirect-fire systems required to suppress a known enemy, leaving the bulk of the combat power available for the assault force.

(4) **Mass and Synchronization.** Inherently interrelated, the application of mass and synchronization improves dramatically within the framework of the SBCT's digital architecture. Not only can the SBCT commander organize and mass combat power more efficiently and effectively, but synchronization now takes a variety of forms. Simultaneous, multi-echelon, collaborative planning coupled with digital dissemination of information insures all maneuver forces and combat multipliers are integrated and understand their roles. Digital rehearsals afford a simulation-like medium in which remotely located, multi-echelon forces can coordinate and synchronize actions up to and beyond an anticipated breaching operation.

b. **Route Clearance Operations.** The nature of SBCT operations makes route clearance a likely task at all levels. Route clearance is a combined arms operation normally assigned to an infantry battalion or company that is task-organized with engineers and other CS and CSS assets as required. Increased situational understanding allows the SBCT greater flexibility in selecting a route clearance method. The engineer squad vehicles may be configured with either a mine plow or roller, depending on what enemy mines are expected. The plow works against surface laid mines and the roller will trigger buried mines; both systems work best on level surfaces. Both the roller and plow have electronics packages to trigger magnetically fused mines. The commander can now rely heavily on the combat route clearance method which, when combined with detailed OBSTINTEL, effectively maintains the momentum for the force, particularly during mounted movement.

c. **Route Construction and Repair.** Although maintenance of routes is potentially critical within the framework of the battlefield, the engineer company has limited route construction and repair capability. The engineer company can clear limited rubble and or debris and construct combat trails, but it requires significant augmentation from division or corps multi-function engineer battalions to perform major route construction and repair. Combat heavy engineers may be task-organized to the SBCT, or they may work in a GS role within the SBCT sector. In either case, the staff engineer coordinates, integrates, and tracks this effort.

10-12. COUNTERMOBILITY

Due to the austere engineer force structure, the staff engineer performs the majority of the obstacle planning that occurs within the SBCT.

a. **Obstacles.** Obstacles may support maneuver during decisive, shaping, and sustaining operations but are predominant during shaping operations. With increased SU, the staff engineer has the ability to plan the precision use of obstacles for both offensive and defensive operations. In either case, the engineer uses obstacles to create engagement areas, protect friendly vulnerabilities, and disrupt enemy actions. Because of the mobile nature of the SBCT, the asymmetric or nonlinear environment in which it operates, and the austere nature of its organic engineer structure, the staff engineer relies primarily on remotely- and ground-delivered SCATMINE systems to shape the battlespace. If the requirement to employ conventional obstacles arises, the SBCT may very well require engineer augmentation.

b. **Obstacle Planning Considerations.** The SBCT engineer now receives the higher HQ obstacle plan via MCS and digitally develops and disseminates the SBCT obstacle plan to all affected friendly forces. During execution, the engineer tracks and reports status through digital updates to the obstacle overlay via FBCB2. Effective obstacle integration occurs by digitally overlaying the combined obstacle overlay on the operations overlay. Obstacle integration correlates directly with sub-unit maneuver and or positioning, engagement area development, and enemy actions during offensive and defensive operations.

10-13. SURVIVABILITY

Although inherent to all operations, survivability most significantly impacts shaping and sustaining operations. It must be considered in some measure during both offensive and defensive operations. Because of the austere nature of engineer company survivability equipment, the SBCT relies heavily on terrain to provide protection for combat, CS, and CSS forces during SSCs. Priority of survivability work will typically go to high value assets such as counterfire radars, signal nodes, and command and control. The engineer company normally employs its limited assets during temporary defensive operations to reinforce reverse slope positions, construct hasty vehicle fighting positions and individual or crew-served weapons positions, and prepare protective positions for CS and CSS elements. In the event of an escalation of the intensity of combat and or the transition to a more deliberate defense, the SBCT will require augmentation from a division or corps multi-function engineer battalion to support increased survivability requirements.

a. **Planning Considerations.** In order to maximize the capability of organic survivability assets, the staff engineer must plan and prioritize survivability effort in detail. The plan should--

- Specify the level of survivability for each battalion battle position and the sequence in which battalions will receive support.
- Digitally integrate command and control of digging assets, site security, CSS (fuel, maintenance, and Class I), and movement times between BPs into a comprehensive, digitally transmitted and updated survivability plan.
- Closely monitor survivability operations via digital reports. Develop and digitally transmit changes or shifting priorities to maneuver and engineer units engaged in survivability operations.

- Closely consider terrain and soil composition in BP selection.
- Start the survivability effort as soon as practical.

b. **Major Theater War.** A major theater war requires additional engineer capabilities across all standard engineer functional areas: mobility, countermobility, survivability, reconnaissance, and sustainment support. Requirements may include manpower and equipment augmentation, general engineering units, engineer reconnaissance forces, terrain visualization assets, and expanded staff support at SBCT and infantry battalion levels. Augmentation likely will come in the form of one or more multi-function engineer battalions, or their sub-units, that can task-organize a wide variety of assets to enhance support to all SBCT elements and perform those critical engineer tasks inherent within an MTW.

c. **Stability and Support Operations.** Engineering efforts are in high demand during stability and support operations because of the need to relieve local human suffering and restore basic public infrastructure and or functions. The SBCT requires engineer augmentation in meeting requirements for construction, facilities repair and management, infrastructure improvements (such as roads and bridges), sanitation, water supply, provision of shelter, and real estate management. Stability and support operations potentially require a multi-functional battalion-sized engineer task force to provide the expertise, equipment, manpower, and command and control inherently necessary for such a large-scale effort.

10-14. MILITARY POLICE SUPPORT

The senior MP planning officer within the MANSPT cell serves as the SBCT MP and is responsible for MP planning, coordination, and synchronization of MP maneuver elements. He serves as the principal advisor to the SBCT commander on matters relating to MP support. He recommends the allocation of resources, tasks, and priority of support. He performs OPCON of any MP assets provided to the SBCT and supervises the execution of any MP missions. MP units provided from division or corps assets support the brigade through their five primary battlefield functions.

a. **Maneuver and Mobility Operations.** MPs, when augmenting the brigade, can support the maneuver and mobility functions by expediting forward and lateral movement of combat resources. MPs used in the circulation control role can perform the following functions:

(1) **Main Supply Route Observation.** MPs continually monitor the condition of MSRs; identify restricting terrain, effects of weather on routes, damage to routes, NBC contamination, and the presence of the enemy; and identify alternate MSRs, when required.

(2) **MSR Regulation and Enforcement.** MP units enforce the command's highway regulation and traffic circulation plans to keep MSRs free for resupply operations. MPs use traffic control points, roadblocks, checkpoints, holding areas, defiles, and temporary route signs to expedite traffic on MSRs.

(3) **Area Damage Control (ADC).** MP units support ADC before, during, and after hostile actions or natural and man-made disasters. ADC operations help reduce the level of damage or lessen its effect. MP support includes, but is not limited to, circulation control, dislocated civilian control, straggler control, NBC detection and reporting, and some physical security when required.

(4) ***Straggler and Dislocated Civilian Control.*** MP units rejoin stragglers with their parent units, thereby preserving combat power. In conjunction with host-nation forces, MP units divert dislocated civilians from MSRs and other locations needed to support maneuver units. These actions enhance unit mobility and prevent the incidence of fratricide and collateral damage.

b. **Area Security.** MPs assist the brigade commander in addressing security and force protection to enhance the maneuver unit's freedom to conduct missions. Area security actions include zone and area reconnaissance; counterreconnaissance activities; and security of designated personnel, equipment, facilities, and critical points. These actions also include convoy and route security. Specific actions include the following.

(1) ***Combating Terrorism.*** MP units (as well as joint multinational and interagency efforts) act to oppose terrorism throughout the entire threat spectrum. These actions include antiterrorism and counterterrorism activities.

(2) ***Physical Security.*** MPs perform physical security and provide physical security guidance focused on physical measures designed to safeguard personnel; prevent unauthorized access to equipment, installations, material, and documents; and safeguard against espionage, sabotage, damage, and theft. Physical security is an integral part of OPSEC.

(3) ***Counterreconnaissance.*** Counterreconnaissance is the cumulative result of security operations. MP units contribute to counterreconnaissance by conducting area security; screen, supporting, and guard operations; as well as OPSEC, deception, and physical security.

(4) ***Personal Security.*** Personal security is one of the five pillars of force protection. MP activities support force protection by providing very important person (VIP) security and security of designated personnel.

c. **Internment and Resettlement Operations.** MPs support tactical commanders by undertaking control of populations (EPW and dislocated civilians) and US military prisoners.

d. **Law and Order Operations.** MPs conduct law and order operations when necessary to extend the combat commander's discipline and control. These operations consist of those measures necessary to enforce laws, directives, and punitive regulations; conduct military police investigations (MPI); and to control populations and resources to ensure the existence of a lawful and orderly environment for the commander. An evolving criminal threat will impact military operations and will require the commander to minimize the threat to forces, resources, and operations. Close coordination with host-nation civilian police can enhance MP efforts at combating terrorism, maintaining law and order, and controlling civilian populations.

e. **Police Intelligence Operations.** Police intelligence operations (PIO) consist of those measures to collect, analyze, and disseminate information and intelligence resulting from criminal activities, law enforcement, security operations, and other MP and criminal intelligence division (CID) operations. The collection of this information needs to be integrated into the overall ISR plan.

10-15. MILITARY POLICE COMPANY ORGANIZATION

The MP company supporting a heavy division, *that may be tasked to provide support to the brigade*, consists of a company headquarters, provost marshal section, three DS MP platoons, and three GS MP platoons.

a. The provost marshal has OPCON of the MP assets provided to the brigade. The MP platoon leader directs the execution of his platoon's missions.

b. The corps MP brigade will normally provide an additional MP company to augment each division. Dependent upon METT-TC, this support may or may not be provided down to brigade level. Likewise, dependent upon METT-TC, the brigade could receive support ranging from platoon- to company-size units from the corps.

10-16. EMPLOYMENT AND PLANNING CONSIDERATIONS

Any one of the five MP battlefield functions (see Paragraph 10-14 above) could easily require an entire MP platoon and more. It is important that the factors of METT-TC be considered when using MP support. During offensive operations, MPs best support the brigade's maneuver and mobility by facilitating route movement and refugee, straggler, and or EPW evacuation and control, and by controlling road traffic. In the defense, MPs are best employed in the area security role to enhance the brigade's maneuver and mobility. It is important that MP resources be synchronized and weighted in support of the brigade's main effort just as any other asset. This will help maximize MP resources allocated to the brigade. MP support may not be available and or adequate to perform all necessary MP battlefield functions simultaneously. Commanders must prioritize those missions and designate other soldiers within the brigade to assist in their execution.

SECTION IV. AIR AND MISSILE DEFENSE

The SBCT does not have organic air defense artillery weapon systems. The brigade does have an organic air defense airspace management cell. The ADAM cell is equipped with an air and missile defense workstation, an air defense system integrator (ADSI), and forward area air defense command, control, and intelligence processor.

10-17. AIR DEFENSE AIRSPACE MANAGEMENT CELL CAPABILITIES

Upon contingency notification, the ADAM cell conducts an assessment to determine if AMD augmentation from the divisional short-range air defense (SHORAD) battalion is required. The ADAM cell conducts continuous planning and coordination proportionate with the augmented sensors deployed within the brigade's AO. The ADAM cell and tailored AMD augmentation force from the SHORAD battalion provide the active air defense over the brigade's distributed force operations in an uncertain and ambiguous battlefield environment. The ADAM cell is integrated within the SBCT operations center and always deploys with the brigade.

10-18. OPERATIONAL FUNCTIONS

The ADAM cell conducts air defense and airspace analysis, coordinates the AMD augmentation into the integrated air defense system (IADS), and performs airspace management and control.

a. **AMD Analysis.** The ADAM cell conducts a supporting METT-TC analysis. Upon completion of this initial analysis, the SBCT commander is briefed and, if required, he approves the request for air defense augmentation from higher.

b. **Coordination of AMD Augmentation.** Coordination for deployment of the recommended AMD augmentation force runs concurrently with the AMD METT-TC analysis. Depending upon force availability (exclusion area boundary [EAB] AMD assets already deployed in the AO), the ADAM cell identifies AMD augmentation force requirements and their availability for rapid deployment. It then integrates this information into the AMD force composition recommendation to the SBCT commander. Upon approval from the SBCT commander, the AMD cell issues a warning order to the selected AMD augmentation force and integrates its deployment within the SBCT deployment scheme.

c. **Integration of AMD Augmentation.** The ADAM cell orchestrates the employment of the AMD augmentation force to establish optimal surveillance and defense of the brigade's maneuver forces and or designated high value assets (HVAs) throughout the mission. The ADAM cell provides the SBCT commander and staff with the aerial component of the overall COP. As the operation evolves, the ADAM cell works continuously with the SBCT staff to ensure the commander's intent is executed with respect to the aerial COP and defenses. The ADAM cell continuously monitors the AMD situation and conducts continual METT-TC analysis to achieve situational understanding of the third dimension in both friendly and enemy perspectives. The ADAM cell integrates into the IADS through direct coordination with EAB air defense coordinators and the battlefield coordination detachment (BCD) collocated with USAF area air defense commander (AADC).

d. **Airspace Management and Control.** The ADAM cell receives and distributes the relevant data from the airspace control order (ACO) and air tasking order (ATO), interpreting and displaying the procedural airspace control means (for example, corridors and restricted operations zones) and scheduled friendly air operations that may impact upon SBCT operations. Additionally, the ADAM cell develops recommended airspace control means supportive of SBCT operations and forwards them to the airspace control authority (ACA) for approval and implementation. In all A2C2 actions, the ADAM cell coordinates existing and proposed airspace control means with all elements of the SBCT force employing aerial assets (for example, Army aviation, friendly force UAVs, and artillery).

Section V. NUCLEAR, BIOLOGICAL, AND CHEMICAL

The brigade chemical section advises the commander on all NBC matters. The chemical section is responsible for collecting, consolidating, and distributing all NBC reports from subordinate, adjacent, and higher units. The chemical section inspects chemical equipment and trains subordinate units on NBC defensive tasks prior to deployment and in garrison.

10-19. NUCLEAR, BIOLOGICAL, AND CHEMICAL ORGANIZATION

The brigade chemical officer is a member of the S-3 plans and operations cell and is normally found in the main CP.

a. **Chemical Officer.** The brigade chemical officer acts as the liaison with any attached chemical elements. He is required to coordinate closely with the S-2 on the current and updated NBC threat. Together they develop NBC NAIs. The chemical officer coordinates with fire support and aviation personnel on planned smoke operations and advises them of hazard areas. He also coordinates with the S-4 on NBC logistics matters (such as mission-oriented protective posture [MOPP], protective mask filters, fog oil) and to identify both “clean” and “dirty” routes as well as contaminated casualty collection points.

b. **Defensive Measures.** A subset of the survivability mission is NBC defensive measures. Chemical staff personnel adhere to three principles: avoidance, protection, and decontamination.

(1) **Avoidance.** Avoiding NBC attacks and hazards is the key to NBC defense. Avoidance involves both active and passive measures. Passive measures include training, camouflage, concealment, hardening positions, and dispersion. Active measures include detection, reconnaissance, alarms and signals, warning and reporting, marking, and contamination control.

(2) **Protection.** NBC protection is an integral part of operations. Techniques that work for avoidance also work for protection, such as shielding soldiers and units and shaping the battlefield. Activities that comprise protection involve sealing or hardening positions, protecting soldiers, assuming MOPP, reacting to attack, and using collective protection.

(3) **Decontamination.** NBC decontamination prevents the erosion of combat power and reduces possible casualties resulting from inadvertent exposure or failure of protection. Decontamination allows commanders to sustain combat operations. Decontamination principles involve conducting decontamination as quickly as possible, decontaminating only what is necessary, decontaminating as far forward as possible, and decontaminating by priority. (See FM 3-4.)

c. **Reconnaissance Platoon.** The NBC reconnaissance platoon, organic to the cavalry squadron (RSTA), is equipped with nuclear, biological, chemical reconnaissance vehicles (NBCRVs). The reconnaissance platoon provides warning and enhanced protection against the NBC threat to include accidental or deliberate release of industrial hazards and terrorism.

10-20. NUCLEAR, BIOLOGICAL, CHEMICAL RECONNAISSANCE

NBC reconnaissance informs the commander of chemical or radiological obstacles on the battlefield. The purpose of NBC reconnaissance is to detect, identify, report, and mark NBC hazards.

a. **The NBC Reconnaissance Vehicle System.** The NBCRV system provides support to the brigade by identifying most battlefield agents in liquid form (persistent), detecting and classifying non-persistent (nerve and blister agents) out to 5 kilometers, and identifying radiological contamination. NBCRVs are employed as squads and may be used separately, but NBCRVs are always mutually supporting (one chain of command). They are IPB focused and work for the brigade commander fulfilling reconnaissance and surveillance taskings. NBCRVs conduct search, survey, surveillance, and sampling operations.

- Search operations include route, zone, and area reconnaissance and are conducted to find the contamination.
- Survey operations are those used to determine the limits of contamination on the ground and are time consuming.
- A surveillance operation is the systematic observation of surface areas to detect NBC attacks and hazards. Surveillance missions may be conducted from a stationary position or on the move.
- Sampling is obtaining a specimen of chemical or biological agent or related materials for later study.

NBCRVs can execute more than one operation in a single mission. Special care must be taken to coordinate with respective friendly forces to avoid fratricide.

b. **NBC Reconnaissance in the Offense.** In the offense, US forces must be able to maintain agility and get to the right place at the right time. Enemy forces may use NBC weapons to slow down or impede attacking friendly forces. Use of NBC weapons can disrupt the tempo and momentum of the attack, allowing the enemy to regain the initiative. NBC reconnaissance is employed to maintain the freedom of maneuver for combat forces on axes of advance, MSRs, and critical areas identified by the commander. Since NBC reconnaissance is IPB-focused, it will be integrated into the ISR plan and have responsibility to cover specific NAIs for specific periods of time. In the offense, NBC reconnaissance is focused on operations that provide the commander flexibility, retain freedom of maneuver, and identify known or suspected areas of contamination.

c. **NBC Reconnaissance in the Defense.** In the defense, as in the offense, NBC reconnaissance is IPB-focused. In defensive operations, NBC assets should focus on ensuring freedom of movement along brigade routes of reinforcement, forward and rearward mobility corridors, and other critical areas identified by the commander. NBC reconnaissance in the defense can conduct route reconnaissance, confirm or deny suspected or known NBC hazards at NAIs, perform reconnaissance as part of quartering party operations, support counterattacking forces, and conduct NBC surveillance of BPs with stand-off detection.

10-21. SMOKE OPERATIONS

The brigade employs smoke in two categories--hasty and deliberate. Hasty smoke is employed for short-term requirements with a minimum of planning. It is normally delivered by generators, mortars, artillery, smoke pots, or handheld devices, and is generally used to protect friendly forces from observation of indirect fire observers or as a response to direct fire engagements. A greater level of detailed planning characterizes deliberate smoke. It is used over large areas for extended periods. Generators and smoke pots generally deliver deliberate smoke. Either type of smoke can be used to deceive the enemy.

a. Smoke can be applied on the battlefield for obscuration or screening.

(1) **Obscuration.** Obscuration smoke is delivered directly on or immediately in front of enemy positions to blind or degrade their vision both within and beyond their location.

(2) **Screening.** Screening smoke is delivered in areas between friendly and enemy forces or in friendly operational areas to degrade enemy ground or aerial observation. There are three visibility categories for screening smoke that the supported unit commander establishes.

(a) *Haze*. A smoke haze is a light concentration of smoke placed over friendly areas to restrict accurate enemy observation and fire. Haze is defined as a concentration of smoke that would allow an individual to identify a small tactical vehicle 5 to 150 meters away.

(b) *Blanket*. A smoke blanket is a dense, horizontal development of smoke used over friendly areas to conceal them from enemy ground and aerial observation. It is defined as a concentration of smoke that would allow the identification of a small tactical vehicle 0 to 50 meters away.

(c) *Curtain*. A smoke curtain is a dense, vertical development of smoke. It is placed between friendly and enemy positions to prevent observation of friendly positions. Since it is not placed on friendly forces, it will not hamper operations.

b. It is imperative that smoke operations in an attack be synchronized. Smoke can greatly assist the commander in maneuvering against the enemy, and it can prevent the enemy from breaking contact. Smoke used to deceive is only effective if it is integrated into the overall tactical plan and involves other deception assets. Smoke by itself without a deception plan will not accomplish the desired goal.

Section VI. INTELLIGENCE

Military intelligence assets are a critical element of the brigade. They are both a source for information gathering and a tool for critical information analysis. MI can also help the commander understand how the enemy employs his ISR assets and recommend measures to counter it.

10-22. PURPOSE

The MI company conducts intelligence analysis and ISR integration as well as HUMINT collection. It supports the brigade's planning, preparation, and execution of multiple, simultaneous decisive actions across the distributed AO. Intelligence systems plan, direct, collect, process, and disseminate intelligence on the enemy and environment in order to support the IPB process. MI assets are used to see the enemy, terrain, and other aspects of battlespace that will effect military operations. The brigade S2 is the commander's focal point for intelligence. He assists the brigade commander in identifying intelligence requirements that support the brigade mission and provides information to the commander for making tactical decisions by fully employing the SBCT's intelligence (SIGINT, IMINT, HUMINT) assets. Through the S3, he directs the activity of the MI company. The MI company provides multidiscipline intelligence support to the brigade.

10-23. EMPLOYMENT AND PLANNING CONSIDERATIONS

MI planning must be integrated throughout the planning process. Intelligence operations are an essential component in winning the information battle. The SBCT S2 and the cavalry squadron (RSTA) coordinate the SIGINT, IMINT, and HUMINT operations of the brigade to dominate the electromagnetic spectrum in the area of operations. Intelligence operations--

- Help the commander seize and maintain the initiative by providing real time knowledge of the enemy's intent, disposition, and readiness.
- Defend friendly information systems by degrading or neutralizing the effects of enemy activity.

- Deny the enemy effective use of his information systems by degrading or destroying enemy communication and targeting systems.
- Can be integrated into unit operations regardless of the type of unit, level of war, or the scope of the mission.
- Complement other destructive systems in the context of overall strategy.

When intelligence operations are synchronized with lethal fires, the friendly commander gains agility by slowing the reaction time of his adversary.

10-24. MILITARY INTELLIGENCE COMPANY

The MI company consists of a small headquarters element, an ISR analysis platoon, an ISR integration platoon, and a tactical HUMINT platoon. A US Air Force weather team and a TROJAN special purpose intelligence remotely integrated terminal (SPIRIT) II team operate with the company during deployments.

a. **Company Headquarters.** The MI company commander directs the employment of the company in accordance with assigned missions and guidance from the brigade headquarters. The MI company commander must position himself where he can best fulfill all of his command responsibilities. This position may be in the brigade command post or on site with a HUMINT collection team. The commander's location could also be at the cavalry squadron (RSTA) tactical operations center, in a supported maneuver unit's headquarters, or with the supported maneuver commander at a critical time or location on the battlefield.

b. **Analysis Platoon.** The analysis platoon conducts the situation development, target development, and battle damage assessment in support of the brigade S2 section. The platoon gathers, analyzes, and fuses information from multiple echelons and sources to produce intelligence products that meet the brigade commander's decision-making and planning requirements. The platoon's analysis of incoming combat information and intelligence reports supports the S2 operations team assessment of the current threat situation. Its term and pattern analysis assists in predicting possible enemy courses of action and potential future activities within the area of operations by individuals or groups. The analysis platoon consists of a situation development team, disposition development team, target development team, imagery analysis team, and a database management team.

c. **ISR Integration Platoon.** The integration platoon is the focal point for intelligence support to planning and targeting. ISR integration encompasses the tasking, processing, redirecting, and fusion of information derived from sensors across all combat information, target acquisition, and intelligence assets. The platoon consists of an ISR requirements team, a S2x team, and a common ground station.

d. **Tactical Human Intelligence Platoon.** The HUMINT platoon conducts HUMINT collection and exploits documents in support of the commander's information requirements in the brigade's AO. The platoon consists of HUMINT control teams and tactical HUMINT teams operating in DS of the brigade's maneuver battalions and reconnaissance squadron. The teams use interrogation, debriefing, and elicitation techniques, as applicable, as well as a limited document exploitation capability to collect actionable combat information

e. **US Air Force Weather Team** The US Air Force weather team provides detailed, tailored weather forecasting information (including support for the UAV operations)

using organic weather automation to assist the command and staff understand weather implications on current and future operations. Through the use of small-footprint collection and processing equipment, the weather team provides detailed weather effects analysis for the area of operations.

f. **TROJAN Special Purpose Intelligence Remotely Integrated Terminal Team.** The TROJAN Spirit section, when employed, is OPCON to the MI company. The TROJAN Spirit section provides the organic non-terrestrial reach capability required to access theater, joint, and national analytic products. It also provides the opportunity for analytic collaboration internal (with the cavalry squadron [RSTA]) and external to the brigade.

Section VII. SIGNAL

Signal analysis of the battlefield is even more critical now than in the past. The SBCT commander will need to consider the reliability of communications in determining the level of risk he will accept in allocation of forces during an operation. The correct placement of limited communications resources will provide the commander with the capability to receive information that produces intelligence for decision-making.

10-25. SIGNAL SUPPORT

To be useful, relevant information must be shared both internally and externally with higher, lower, and adjacent units so that all are operating from a common operational picture. The synergy that comes from that shared information and the resulting increased situational understanding is critical to successful operations. The signal company assets of the brigade provide the support that makes this information-sharing possible.

10-26. SIGNAL COMPANY ORGANIZATION

The brigade signal company (BSC) is organic to the SBCT and provides the primary communications support to the brigade. The BSC deploys, installs, operates, and maintains the C2 INFOSYS networks supporting brigade operations and integrating with the division ARFOR, JTF, or theater networks. The signal support and nodal platoons are the operational arm of the company. They collectively deploy and operate the brigade transmission and switching systems to provide voice, data, and network installation and management support. The brigade signal company--

- Provides reach connectivity through the ARFOR headquarters.
- Provides range extension of the brigade's communications services.
- Provides network management.
- Establishes primary TOC voice and or video capabilities.
- Performs limited signal electronic maintenance.

a. **Brigade Signal Company Headquarters.** The BSC headquarters consists of the command and network operations sections.

(1) **Command Section.** The command section consists of the BSC commander, first sergeant, and supply NCO. The command section is responsible for the administration and logistics support for the company.

(2) **Network Operations Section.** The network operations section consists of the computer network defense and network management teams. These teams execute the installation, operation, and maintenance of the computer network defense (CND) and

network management functions of the SBCT's information network. The NETOPS section establishes the network operations and security center and NOSC-forward while operating closely with the TOC nodal platoon. The NETOPS utilizes the organic network management capability of the TOC nodal platoon brigade subscriber net (BSN) to configure, monitor, and manage the information network. The NOSC coordinates with the ARFOR for aerial communications relay package (CRP) operations and extends network connectivity through ground and satellite assets. Figure 10-2 shows the NETOPS section structure.

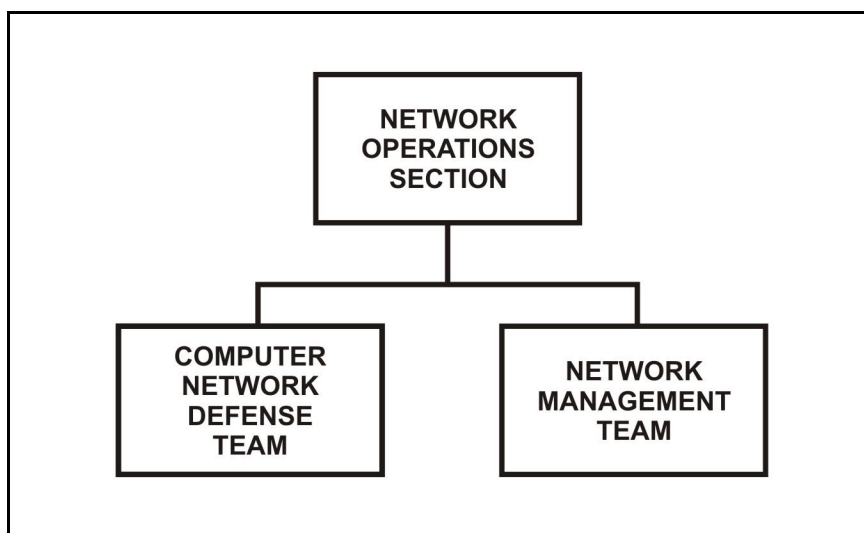


Figure 10-2. NETOPS section structure.

b. **Brigade Signal Company Nodal Platoon.** The BSC nodal platoon consists of the tactical satellite (TACSAT), BSN, and TROJAN Spirit teams. Figure 10-3, page 10-22, shows the BSB nodal platoon structure.

(1) ***Tactical Satellite Team.*** The TACSAT team provides beyond-line-of-sight (BLOS) connectivity to the BSB.

(2) ***Brigade Subscriber Net Team.*** The BSN team provides the nucleus for voice, video, and data services to the SBCT main CP and the BSB.

(3) ***TROJAN Spirit Teams.*** The TROJAN Spirit teams provide the organic non-terrestrial reach capability required to access ARFOR, theater, joint, and National Security Agency (NSA) analytic products. TROJAN Spirit teams also provide the opportunity for collaboration internal with the cavalry squadron (RSTA) as well as external to the SBCT.

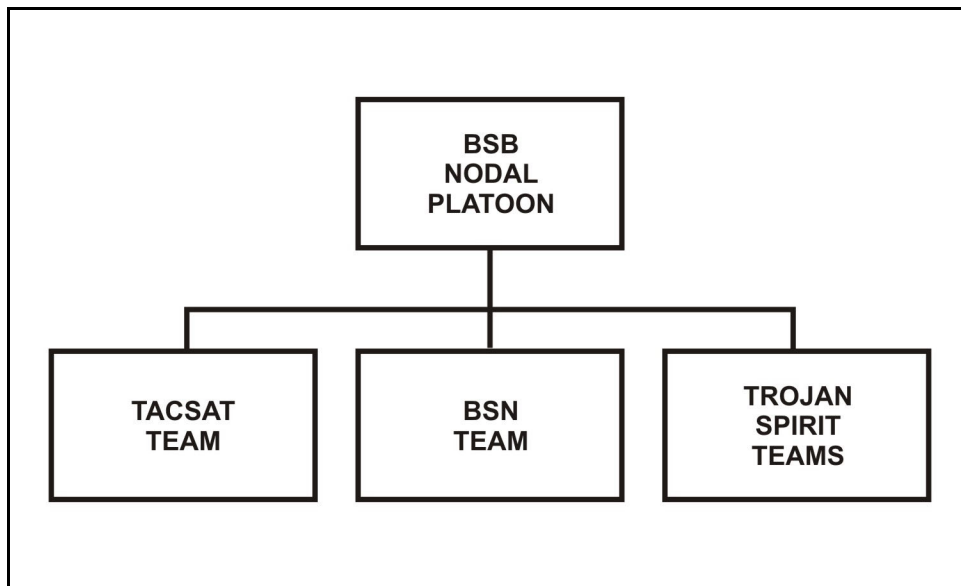


Figure 10-3. BSB nodal platoon structure.

c. **TOC Nodal Platoon.** The TOC nodal platoon (Figure 10-4) works closely with the NETOPS section in the operation of the NOSC at the SBCT main CP. The NOSC utilizes the organic network management capabilities of the BSN and has the primary network management responsibility for the information network.

(1) **Tactical Satellite Teams.** The TACSAT teams provides BLOS support to the SBCT main and forward CPs.

(2) **Brigade Subscriber Net Team.** The BSN team provides voice, video and data services, and LAN management capabilities at the SBCT main CP.

(3) **TOC/Local Area Network (LAN) Support Team.** The TOC/LAN support team provides LAN support to the SBCT main and forward CPs.

(4) **TOC System Support Section.** The TOC system support section provides subscriber support functions and signal support for all communications systems supporting the SBCT main and forward CPs.

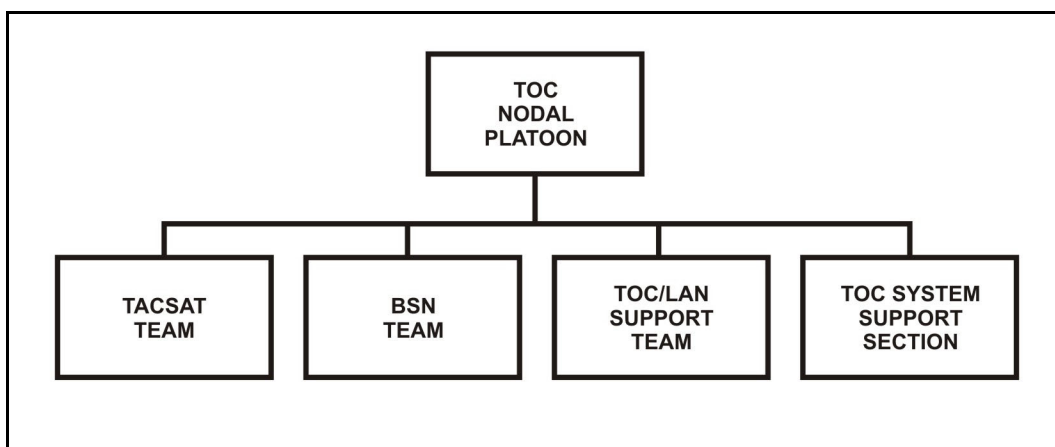


Figure 10-4. TOC nodal platoon structure.

d. **Signal Support Platoon.** The signal support platoon consists of the tactical communications section and network control station-enhanced position locating and reporting system (NCS-E) team. Figure 10-5, page 10-24, shows the signal support platoon structure.

(1) **Tactical Communications Section.** The tactical communications section provides range extension and network connectivity support for the enhanced position locating and reporting system, TOC-to-TOC data, and SINCGARS networks. When airborne range extension capabilities are not available, the retransmission (Retrans) teams may be placed at remote sites to provide range extension of voice or data communications. The gateway teams provide connectivity to adjacent EPLRS networks. The teams also provide dedicated relay support for the SBCT.

(2) **Network Control Station for Enhanced Position Locating and Reporting System Team.** This team provides connectivity support for network initialization, monitoring, control, and configuration to maintain the EPLRS backbone of the TI.

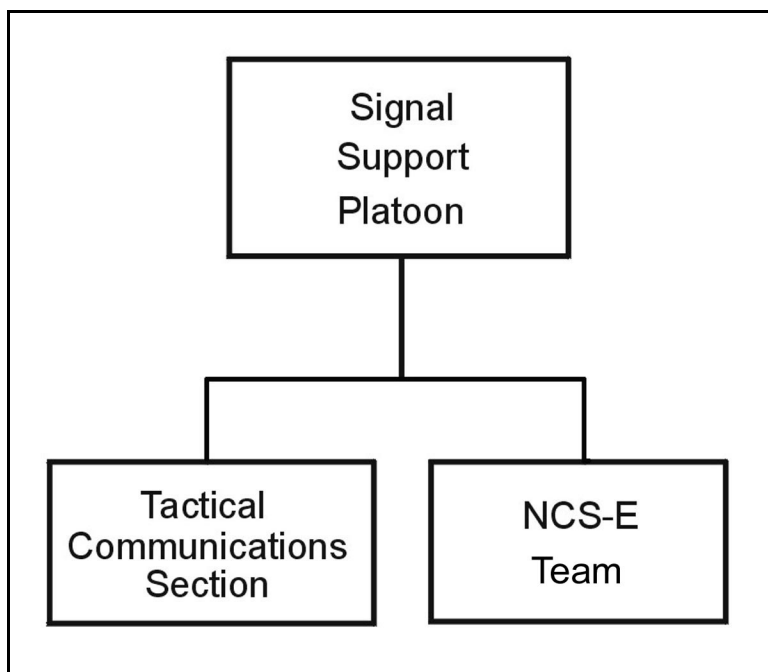


Figure 10-5. Signal support platoon structure.

10-27. BRIGADE SIGNAL COMPANY COMMUNICATIONS AND EQUIPMENT

The effectiveness of the SBCT as an early entry force will depend significantly on its ability to establish communications to compensate for the austere CS and CSS capabilities.

a. **Communications Networks.** Doctrinally, communications are established from higher to lower, left to right, and supporting to supported. The SBCT is designed to exploit nonorganic capabilities located both within and outside the theater. The capability of reach communications to expand the power and effectiveness of the force comes from the precept that the commander can utilize resources external to the area of responsibility (AOR).

b. **Subnetworks.** The following paragraphs provide an overview of each subnetwork. Table 10-1 shows the location of each SBCT C2 node information network subscriber by subnetwork.

SBCT Element	Subnetworks				
	WAN	TI	CNR	TOC to TOC	GBS
Main CP	X	X	X	X	X
Command Group		X	X	X	
TAC		X	X	X	
Forward CP	X	X	X	X	
BSB	X	X	X	X	X
RSTA		X	X	X	X
INF BN (x3)		X	X	X	X

Table 10-1 Information network.

(1) **Wide Area Network.** The WAN provides telephone, data, and collaborative planning services to the SBCT main CP and BSB. These multi-channel TACSAT terminals provide transmission capabilities for voice, video, and data applications.

(2) **Tactical Internet.** The TI integrates EPLRS, FBCB2, and supporting communications equipment into a mobile data network.

(3) **Combat Net Radio.** The CNR provides the SBCT with very high frequency-frequency modulated (VHF-FM), high frequency (HF), and single-channel TACSAT capabilities to execute C2 of forces throughout the SBCT AO.

(4) **Tactical Operations Center to Tactical Operations Center Data Network.** The TOC-to-TOC data network enables users to exchange C2 information between TOCs and key C2 platforms.

(5) **Global Broadcast Service.** The GBS enables the SBCT staff to receive products such as imagery, logistics data, and digital map information. Examples of information that may be sent over the GBS include--

- Video broadcasts.
- UAV video feed.
- Common ground station sensor data.
- MCS overlays (friendly operational picture).
- ASAS overlays (enemy operational picture).

- Friendly operational picture overlaid with enemy picture from ASAS.
- Other large volume data.

10-28. ELECTRONIC PREPARATION OF THE BATTLEFIELD

The S6 must conduct an electronic preparation of the battlefield (EPB) early enough for the commander to make informed decisions on assigning missions to ISR assets and subsequently to maneuver forces. Critical to the EPB is a risk analysis based upon the recommended network architecture.

a. The commander must incorporate the EPB into his decision-making process early enough to understand the limitations in communications when planning the maneuver for his unit. The commander must also indicate what his critical information requirements are in order for the S6 to ensure infrastructure support to that requirement.

b. The initial EPB must be refined as the commander decides what risks he will accept in the C2 INFOSYS arena. The S6 will plan the coverage of the battlefield with the available networks. Any shortfalls in communications coverage will be identified to the brigade S3 and commander. Refinement of coverage is determined by the commander's estimate of critical information requirements.

(1) Adapting the C2 INFOSYS plan to the priorities set by the commander requires close coordination by the S6 with the other staff members and particularly with the information officer. The information officer will determine the priority of information being passed, and the S6 will provide the transport path for that information. The S6 must ensure that the information officer is aware of the system limits and capabilities at all times, and the information officer must ensure that the S6 is aware of the IO priorities at all times.

(2) The signal annex must provide clear understanding of the unit's communications architecture and how it will operate on the battlefield. A number of styles of information presentation are effective: text, preformatted templates, and matrixes. The annex must incorporate all communications resources. Providing a signal concept sketch to the commander works best. The graphic presentation provides the commander with a clear and concise understanding of the communications plan. Critical elements include: concept of communications; CP locations; and tactical range extension (T-REx) locations. The S6 must capture information for the complete task organization in order to portray an accurate picture.